Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

1-28   (Cancelled)

29.   (Currently amended) A method for displaying contig-component relationships comprising:

    a. providing EST data from a plurality of EST source libraries wherein, the EST data comprises: ESTs, their library of origin, and their membership in an assembled contig;

    b. providing a multi-dimensional display comprising a circular figure, wherein,

        loci representing each source library comprising the plurality of EST source libraries, are distributed about the periphery of the circular figure;

    c. assembling contigs by removing EST redundancy, and aligning and clustering ESTs that comprise the plurality of EST source libraries, using an assembly algorithm, thereby producing assembled contigs;

    d. plotting a at least one symbol within the multidimensional display, corresponding to an at least one assembled contig, wherein

        the at least one symbol is positioned within the multidimensional display according to relative contributions of ESTs from the source library libraries used to assemble the at least one contig;

    thereby displaying contig-component relationships by positioning the at least one symbol corresponding to the at least one assembled contig within the multi-dimensional display, at a point within an area located

between the loci representing the EST source libraries that contributed
to assembly of the <u>at least one</u> contig.

30.   (Currently amended) The method of Claim 29, wherein positioning the <u>at least
one</u> symbol corresponding to the <u>at least one</u> assembled contig within the multidimensional
display, is determined as a function of the number of source libraries which contributed at
least one EST to the <u>at least one</u> assembled contig.

31.   (Currently amended) The method of Claim 29, wherein positioning the <u>at least
one</u> symbol corresponding to the <u>at least one</u> assembled contig within the multidimensional
display is determined as a function of the proportion of ESTs in the <u>at least one</u> assmbled
contig that are contributed by each source library.

32.   (Currently amended) The method of Claim 29, wherein positioning the <u>at least
one</u> symbol corresponding to the <u>at least one</u> assembled contig within the multidimensional
display is determined as a function of the number of ESTs in the <u>at least one</u> assembled
contig from a given source library relative to the total number of ESTs in the source library.

33.   (Previously presented) The method of claim 29, wherein source libraries are
members selected from the group consisting of source libraries comprising EST data from: a
species, a cultivar, a tissue, a developmental stage, and a stress condition or a combination of
such members.

34.   (Previously presented) The method of claim 29, wherein the method is used to
perform mock microarray analysis.

35.   (Currently amended) The method of claim 29, wherein positioning the <u>at least one</u>
symbol corresponding to the <u>at least one</u> assembled contig within the multidimensional

display is influenced by the placement of the of the source libraries about the periphery of the circular figure.

36.   (Currently amended) A ~~computer program stored on a~~ computer readable storage medium <u>having computer program</u> for displaying contig-component relationships <u>stored thereon, wherein the computer program for displaying contig-component relationships</u> ~~comprising~~ <u>comprises</u>:

       a.   a receiving code segment;

       b.   an assigning code segment; and

       c.   a plotting code segment

wherein the <u>computer</u> program causes a computer to:

(i) utilize EST data from a plurality of EST source libraries to assemble contigs by removing EST redundancy<u>,</u> and aligning and cluster<u>ing</u> ESTs comprising the plurality of EST source libraries using an assembly algorithm <u>thereby producing assembled contigs</u>; and

(ii) plot ~~a~~ <u>at least one</u> symbol corresponding ~~an~~ <u>to at least one</u> assembled contig within a multidimensional display comprising a circular figure, wherein the <u>at least one</u> symbol is positioned within the multidimensional display according to relative contributions of ESTs from ~~each~~ <u>the</u> source ~~library~~ <u>libraries</u> used to assemble the <u>at least one</u> contig; thereby positioning the <u>at least one</u> symbol corresponding <u>to</u> the <u>at least one</u> assembled contig within the multi-dimensional display, at a point within an area located between the loci representing the EST source libraries that contributed to assembly of the <u>at least one</u> contig.